

## Abstract of the Invention

### Tangential Filtration Housing

A filtration housing is disclosed. The housing includes: a first plate and a second plate, where the first plate and the second plate are configured to retain a filtration cassette; the second end plate includes a feed channel that communicates with an inlet port, where the inlet port is connected to a source of fluid; the first plate includes a retentate channel that extends into an outlet port; the second plate includes a first filtrate channel and a second filtrate channel, where the first filtrate channel includes a first longitudinal portion that is parallel to the feed channel and a transverse portion that communicates with a first filtrate passage; the second filtrate channel includes a second longitudinal portion that is parallel to the retentate channel and a second transverse portion that communicates with a second filtrate passage; and the first and second transverse filtrate channel portions are configured to form acute angles with an upper surface of the first end plate, where the source of fluid is configured to flow out of an outlet port of the first end plate.